

## ABSTRACT

The present invention provides an apparatus for separating and purifying nucleic acids, which comprises: a cylindrical syringe having a leading end part in which a first opening part is formed, a base end part in which a second opening part is formed and an accommodation part between said first opening part and second opening part, the accommodation part being able to hold liquid therein; and a solid phase-holding member connected to said leading end part, a flow hole being formed at the leading end side of the solid phase-holding member; wherein a solid phase comprised of an organic polymer having a hydroxyl group on the surface thereof is accommodated in said solid phase-holding member, the solid phase being able to adsorb and desorb nucleic acids in a sample solution; and wherein a pressure sensor capable of detecting the pressure in the accommodation part is connected. The use of the apparatus for separating and purifying nucleic acids of the present invention allows efficient separation of highly pure nucleic acids from a sample solution containing nucleic acids in a shorter time than before.